REMARKS

Reconsideration and allowance for the above-identified application are now respectfully requested. Claims 1-8, 9-19, 21-24, and 26-38 are now pending, of which claims 1, 10, and 36 are independent method claims, and claim 27 is an independent computer program product claim corresponding to independent method claim 10. As indicated above, claims 1, 6, 10-11, 14, 17, and 21-28 have been amended by this paper.[1]

The Office Action rejected the most recent independent claims (1, 10, 20, and 27) under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,553,410 to Kinkinis ("*Kinkinis*"), in view of U.S. Patent No. 5,850,517 to Verkler et al. ("*Verkler*"), and further in view of U.S. Patent No. 6,785,680 to Cragun ("*Cragun*").[2] The Office Action also rejected the remaining dependent claims under the same 35 U.S.C. § 103(a) bases.

Applicants' invention, as claimed for example in independent method claim 1, relates to customizing content based on at least one operating characteristic of a mobile client. The method includes: assigning a first transform to the first mobile client and assigning a second transform to the second mobile client, the first and second transforms specifically considering one or more operating characteristics of the first and second mobile clients; receiving a list from the content server containing addresses for a plurality of mobile clients, including the first mobile client and the second mobile client; receiving content from the content server, the content being addressed to the list, wherein the content has not yet been altered in accordance with the first or second transform; determining at the mobile gateway that the first transform and the second transform are to be applied to the received content upon the mobile gateway identifying

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[1] Support for the amendments to the claims can be found throughout the Specification, and particularly at page 16, lines 5 – page 18, line 12-20.

[2] Although the prior art status of the cited art is not being challenged at this time, Applicants reserve the right to do so in the future. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status or asserted teachings of the cited art.

that the list includes an address for the first mobile client and an address for the second mobile client; altering the content at the mobile gateway according to the first and second transforms so that the content is compatible with the one or more operating characteristics of the first and second mobile clients, the altered content comprising a first transformed content and a second transformed content; addressing the first transformed content to the first mobile device and addressing the second transformed content to the second mobile device using the plurality of addresses received in the list; establishing a communication link between the mobile gateway and the first and second mobile clients; and sending the first transformed content to the first mobile client and sending the second transformed content to the second mobile client.

Similarly, Applicants' invention as claimed for example in independent method claim 10, also relates to customizing content based on at least one operating characteristic of a mobile client. The method includes: assigning a first transform to a first mobile client and a second transform to a second mobile client, the first transform specifically considering one or more operating characteristics of the first mobile client, the second transform specifically considering one or more operating characteristics of the second mobile client; determining at the mobile gateway that a change has occurred with the one or more operating characteristics of the first mobile client, such that prior hardware or software configuration information of the first mobile client is incompatible with the first transform; creating an updated first transform at the mobile gateway, wherein the updated first transform is consistent with the change operating characteristics of the first mobile client; receiving content from the content server; altering the content at the mobile gateway according to the updated first transform and with the second transform so that the content is compatible with the change in the one or more operating characteristics of the first mobile client and with the one or more operating characteristics of the

second mobile client; establishing a communication link between the mobile gateway and the first mobile client; and the mobile gateway sending the content altered in accordance with the updated first transform to the first mobile client, and sending the content altered in accordance with the second transform to the second mobile client.

Likewise, Applicants' invention as claimed for example in independent method claim 36, relates to customizing the content from the content server based one or more operating characteristics identified for a plurality of intended recipients. The method includes: receiving content from a content server at the mobile gateway, wherein the content is addressed by the content server to at least a first mobile client, a second mobile client, and a different mobile gateway; a step for determining at the mobile gateway an appropriate content transform for each of the first mobile client, the second mobile client, and for the different mobile gateway based on detected operating characteristics for each of the first mobile client, the second mobile client, and for the different mobile gateway; assigning at the mobile gateway a first content transform to the first mobile client, a second content transform to the second mobile client, and a third content transform to the different mobile gateway, wherein the first, second, and third content transforms correspond to the detected one or more operating characteristics of the first mobile client, the second mobile client, and the devices managed by the different mobile gateway; the mobile gateway sending content transformed by an updated first content transform to the first mobile client, content transformed by the second content transform to the second mobile client, and content transformed by the third content transform to the different mobile gateway.

By contrast, *Kinkinis*, *Verkler*, and *Cragun* each fail to teach, suggest, or enable, whether singly, or in combination, determining at the mobile gateway that the first transform and the second transform are to be applied to the received content upon the mobile gateway identifying

that the list includes an address for the first mobile client and an address for the second mobile client; and altering the content at the mobile gateway according to the first and second transforms so that the content is compatible with the one or more operating characteristics of the first and second mobile clients, the altered content comprising a first transformed content and a second transformed content, as recited in amended claim 1.

In particular, what might be construed as a mobile gateway (e.g., "message gateway 204") in *Verkler* does not determine a transform for a mobile client, nor does the message gateway actually transform the content before sending it to the mobile client. Rather, the mobile gateway in *Verkler* maintains configuration information that the client can identify and download, and then ultimately make appropriate modifications for receiving and processing content it receives from the message gateway. Thus, the responsibility to transform and configure communications rests with the client rather than with the intermediary (*e.g.*, a mobile gateway) that holds the configuration information and passes along content. *Compare, e.g.*, col. 7, ll. 14-16 (stating that the client's "message manager 306 includes the driver and any necessary functionality to support each of these communication functionalities"), *with* col. 7, ll. 50-63 (stating that the message gateway "contains all the system-level component configuration information . . . [which] allows all [client] components to be self-configuring to reduce the risk of installation and user errors") *and with* col. 8, ll. 1-16 (describing how the client contacts the message gateway to identify configuration information, and the client implements the identified configuration information before receiving a message from the message gateway).

In addition, although *Kikinis* teaches modifying content received from a content server (*e.g.*, "Any Web Server 23") that was requested by a client device, *Kikinis* fails to teach or suggest, whether singly or in combination, determining at the mobile gateway that the first

transform and the second transform are to be applied to the received content upon the mobile gateway identifying that the list includes an address for the first mobile client and an address for the second mobile client.

Furthermore, while the *Cragun* reference teaches use of a list of mobile devices, the *Cragun* reference fails to teach or suggest in combination with *Kikinis* or *Verkler* the acts of receiving content from the content server . . . , determining at the mobile gateway that the first transform and the second transform are to be applied . . . , and altering the content at the mobile gateway. In particular, there is no mobile gateway that performs any function in the *Cragun* reference; and, rather, there is only a content server that performs dual functionality of content generation and modification in the *Cragun* reference. Thus, not only does the *Cragun* reference fail to teach each of the limitations of Applicants' invention, but the *Cragun* reference also teaches away from combination with *Kikinis* and *Verkler*.

For example, the *Cragun* reference teaches a direct passing of content from a content server to a client device, with no use of a third-party content server, or use of an intermediate server configured to handle content transformations. *See, e.g.,* Figure 3; *see also* col. 2, l. 45 – col. 3, l. 54 (each embodiment describing an entity providing content directly to a device). This is an architecture that Applicants have specifically identified as a problem in the art. For example, Applicants' application emphasizes the importance of not sending content directly from the content server to a client device, such as taught in *Cragun*. As stated on page 4 of Applicants' "Background and Related Art," for example:

> While customizing content based on the device that will receive the content is desirable, customization leads to problems of its own. For example, [content servers] often operate at near capacity. Introducing the additional processing necessary to customize content by device operating characteristics may degrade server performance beyond tolerable limits. Furthermore, implementing the customization at [the content server] requires changes to the [content server] for

each new type of mobile device that becomes available. Frequent changes to [content server] code imposes substantial coding and testing responsibilities on developers, due to the already complex nature of [content servers]. Moreover, already overburdened information systems staff are forced into essentially constant upgrade cycles as developers release new software, especially for rapidly advancing technologies like mobile devices.

As such, an important aspect of Applicants' invention is the use of an intermediary mobile gateway that makes transformation determinations for multiple devices and applies those determinations to content received from the third-party content server before sending the content to a client, such that the mobile client and content server are essentially passive entities that primarily send or receive data. This architectural aspect of passiveness for the content server and mobile clients in Applicants' invention is important for a number of reasons. In particular, and as inferred from the quote above, Applicants' invention relieves a large deal of resource overhead that would be otherwise associated with a content server when the content server is required to customize and to send content tailored for specific mobile devices. *See also* Applicants' Application at pp. 7-8, and 17.

Accordingly, Applicants respectfully submit that there is no suggestion, or obvious motivation in the *Cragun* reference or in the *Kikinis* or *Verkler* references to combine these references, and therefore teach the limitations of determining and assigning transforms at a mobile gateway based on content and a list received from a content server, as recited in amended claims 1 and 27 (as well as in claim 36 where similar limitations are found).

Regarding claim 10, and for similar reasons as those described above, *Kikinis* and *Verkler* also each fail to teach, suggest, or enable, whether singly, or in combination with *Cragun*, the acts of determining at the mobile gateway that a change has occurred with the one or more operating characteristics of the first mobile client . . ., creating an updated first transform at the mobile gateway, wherein the updated first transform is consistent with the change in operating

characteristics of the first mobile client, and the mobile gateway sending the content altered in accordance with the updated first transform to the first mobile client, and sending the content altered in accordance with the second transform (i.e., non-updated) to the second mobile client, as recited in amended claim 10 (similar limitations are also found in new claim 36).

Rather, *Verkler* teaches that the client devices have responsibility for configuration information. *See, e.g.,* col. 7, l. 14 – col. 8, l. 16. Furthermore, *Kikinis* teaches that a proxy server can be upgraded generally for additional improvements, but does not teach updating only certain transformations and not others. *See, e.g.,* col. 13, ll. 7-14. Similarly, *Cragun* teaches that a content server can modify content for different device interfaces, but does not teach that the content server can update the algorithms (i.e., transforms) used for these modifications on a device-by-device basis, as needed, much less a mobile gateway that performs such updates to a transform. In particular, *Cragun* teaches that it is preferable for all devices to have the same interface for content modification. *See, e.g.,* col. 12, l. 41 – col. 13, l. 6.

Regarding new claim 36, and also for reasons discussed above, none of *Kikinis, Verkler,* nor *Cragun* teach, suggest, or enable, whether singly, or in combination, the act of receiving content from a content server at the mobile gateway, wherein the content is addressed by the content server to at least a first mobile client, a second mobile client, and a different mobile gateway; and a step for determining at the mobile gateway an appropriate content transform for each of the first mobile client, the second mobile client, and for the different mobile gateway based on detected operating characteristics for each of the first mobile client, the second mobile client, and for the different mobile gateway. Accordingly, Applicant has cancelled claim 10 in lieu of new claim 36, and has amended claims 21-26 to depend from new claim 36.

In addition to the foregoing, Applicants also note that these references further fail to teach, suggest, or enable, whether singly, or in combination, wherein the one or more operating characteristics considered by the first and second transforms include the first and second mobile client's memory capabilities, and at least one of the first or second mobile client's software, processor, display, or communication link, as recited in amended dependent claims 6, 11, 23, and 28. (This functionality is also highlighted in new dependent claims 37-38.) In particular, Applicants find no mention of client device memory in the *Verkler*, *Kikinis*, or *Cragun* references, particularly in consideration of a client's ability to received transformed content, such as claimed in new dependent claims 37-38. As found in Applicants' specification at pp. 16-18 and 22, this is one of the many client device capabilities that the mobile gateway can consider in a transformation, particularly when a file received from the content server contains content (*e.g.*, large graphics files) that are simply to large to send onward to a mobile device, or cannot be processed by the mobile device (*e.g.*, a text-only pager).

As a final matter, Applicants have amended claim 27 to overcome the *Office Action* rejection with regard to antecedent basis.
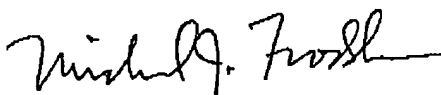
Based on at least the foregoing reasons, therefore, Applicants respectfully submit that the cited prior art fails to anticipate or make obvious Applicants' invention, as claimed for example, in amended independent claims 1, 10, and 27, and in new claims 36-38. Applicants note for the record that the remarks above render the remaining rejections of record for the independent and dependent claims moot, and thus addressing additional rejections or assertions, which have not already been addressed above, with respect to the teachings of the cited art is unnecessary at the present time, but may be undertaken in the future if necessary or desirable, and Applicants reserve the right to do so.

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In the event that the Examiner finds remaining impediment to a prompt allowance of this

application that may be clarified through a telephone interview, the Examiner is requested to

contact the undersigned attorney.

Dated this 28th day of December, 2005.

Respectfully submitted,

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